11. Triangles

Program Name: Triangles.java Input File: triangles.dat

You and your friend have been playing a game involving random sticks that you have found in your yard. You put these sticks in a pile and randomly choose three sticks and then see if you can form a triangle with them. If you can, you win one point. The stick is replaced and your friend does the same. You are curious about how many different combinations of sticks would allow you to win a point.

You remember from your Geometry class that the sum of the lengths of any two sides of a triangle must be greater than the length of the third side. You have decided to write a program to find out how many different combinations of the sticks in a pile could form a triangle.

Input

The first line of input will contain a single integer `n` that indicates the number of piles of sticks that will follow. Each of the following `n` lines will contain a space delimited list of five positive integers denoting the lengths of five sticks.

Output

For each pile of sticks, you will print the number of distinct combinations of sticks will form a triangle.

Example Input File

```
3
3 3 3 3 3
4 6 8 3 7
6 8 10 13 2
```

Example Output to Screen

```
10
8
4
```